Commission to Study the Comprehensive Shoreland Protection Act

Minutes of July 10, 2006 Meeting Room 305, Legislative Office Building, Concord, NH 10:00 a.m. - 12:00 p.m.

Members Present

Interest Represented Representative House of Representatives David Currier **Regional Planning Commissions Robert Snelling** NH Lakes Association William Smith, PhD At large waterfront owner Michele Grennon

At large waterfront owner Eric Herr NH Association of Realtors Tom Howard NH Municipal Association Carol Granfield NH Rivers Council Kathryn Nelson Tom Hahn NH Timberland Owners

Landscaping Consultant George Pellettieri **NH Conservation Commissions** Diane Hanley NH Attorney General (designee) Jennifer Patterson NH Wildlife Federation James Kennedy Commissioner, DES Rene Pelletier NH Farm Bureau Federation John McPhail Joe Landers NH Home Builders and Remodelers UNH (estuary) Jeff Schloss NH Marine Trades Association

Members Absent

Carl Johnson Senate Senate John Gallus House of Representatives Michael Whalley NH Natural Resource Scientists Cindy Balcius Stephen Del Deo NH Waterworks Association Jennifer DeLong Director, OEP

Others in Attendance

Staff Arlene Allen for Darlene Forst

Paul Goodwin

10:00 a.m. Meeting opened.

Chairman David Currier called the meeting to order. He noted that Darlene Forst was unable to attend this meeting due to illness and therefore there were no minutes to review. Darlene will email all members the draft minutes from the last meeting and they will be reviewed at the next meeting.

Report from the Natural Woodland Buffer (NWB) Subcommittee

Dr. William Smith reported that the NWB Subcommittee has been meeting regularly. At the last meeting, a draft proposal for a points system to assess and regulate shoreland vegetation was distributed to members. The NWB subcommittee is anxious to receive input from members about the proposal. Dr.. Smith suggested that the NWB Subcommittee take whatever input is received today, work on incorporating it into the proposal, and then fine tune the proposal so that it can be brought to the August meeting for a formal vote.

Dr. Smith reiterated that, in the subcommittee's opinion, the integrity of the woodland buffer is the essence of the CSPA. The current wording, especially the 50% basal area time bounded requirement, is not effective. A points system is being proposed that would value woody vegetation in a systematic way on a grid basis without time bounding. This is a superior way to achieve continuance of the desirability of a woodland buffer. The draft proposal is essentially what will be delivered to the members at the August meeting. Dr. Smith asked for comments.

Paul Goodwin observed that the last six weeks have been an eye opener, especially on Lake Winnipesaukee, and said that to be brutally honest, he was not sure that a woodland buffer matters. The siltation that has been seen on the lakes this year has little or nothing to do with the shoreland zone. He thinks there is a big problem with erosion, upland. Lake Winnipesaukee went up from 8" below full to 14" over full in three days. The lake was turbid for weeks. He said he tried to take photographs from a plane and the amount of siltation coming in from rivers and seasonal runoff was incredible. He spent a lot of time trying to figure out what the Shoreland Protection Act has to do with that, and he's not sure it has anything to do with it. The things that he saw have nothing to do with the woodland buffer. On Rattlesnake Island, whole chunks have slipped into the lake. Some of these sites on the lake have nothing to do with developed land. This is undeveloped land. On two of these sites, he estimated that pine trees that were 80' to 90' tall took the bank as they fell, and they did not fall into the lake, they slumped into the lake. These are undeveloped sites, so the value of that tree was detrimental to the buffer. He feels that there is no science in the way the points system works, with the larger trees considered better, and it is contrary to what the commission is trying to do. He would argue that a well designed lawn and a properly engineered drainage system might be better in some cases then large trees, especially the pine trees, because the root mat is spread out in a horizontal direction. There is not much vertical development so when they move they take the whole bank with them. One of the sites he saw looked like something out of a science fiction movie. Literally, the whole bank was in the lake, gone. Whole trees still standing are now out in the water. Those tall trees, had they not been there, maybe they contributed to the erosion of the bank. He's not sure where we're coming up with a big tree counts more. The assumption is a big

tree is better. He understands that big trees create shade and there's other things, but maybe we need to take a step back and look at what we are trying to do. We are trying to protect the integrity of the slope – not necessarily protect big trees. Maybe it's an aesthetics thing or something but it's just something to think about.

Mr. Goodwin added, on the proposal, under item #2 Riparian Zone, that Riparian is the wrong word. Riparian refers to river and he thinks that the proposal is referring to both rivers and lakes. That title should be changed. Riparian rights means adjacent to rivers.

Under section V(a)(2)(A) it says no ground cover shall be removed except for permitted accessory structures and access ways. He does not know whether that refers to the fact that you need to get a permit or that those structures and access ways are allowed.

Mr. Goodwin stated that he was not sure the grid system is something the general public would like. He has been working with Moultonborough to try to get their applications squared away and it's a nightmare. He knows a comment was made that some people on this committee thought it might be too complicated and would try to simplify it, that's a good thing. The town of Moultonborough can't even tell you right now whether it's supposed to be a tree inventory or a permit.

Rep. Currier asked for clarification on "tree inventory or permit".

Mr. Goodwin replied that there are vague references as to whether every property owner must file this thing, or you only need to file it if you need to do something. There are conflicting opinions between people that are tasked with straightening out the application process. A tree inventory is a heck of a lot of work for a lot of people that may not need to do anything. He does not know what the town is going to do with all that information.

Rep. Currier asked for clarification of what the issue was in Moultonborough.

Tom Hahn responded that he had spoken to the Chair of the Moultonborough Planning Board. They recognize that there is a problem. His understanding is that they are fine tuning a proposal to change the ordinance and that there will probably be a change next year that makes the inventory necessary only in areas that are proposed to be cut.

Rep. Currier asked if the town ordinance says that anyone that has lake front property has to do an inventory.

Tom Hahn responded that it does not say that but it is inferred. What the town is struggling with is the situation in which you want to do some tree cutting and you have a thousand feet of frontage but you only want to cut on 25' to 50' of your frontage. Do you do the inventory the entire 1000' or just the area of cutting? That is the fine tuning that the town will be undertaking.

Rep. Currier asked for further clarification. Are they saying that if you are only cutting 50', you do not have the inventory the entire 1000'? Tom Hahn answered, yes. His understanding was that was the direction the town was going in.

Rep. Currier noted that, in this case that was just cited, where they were doing something in a 50' area, wouldn't you want to know what the entire parameter was? Tom Hahn responded that if

you are not doing anything on 90% of your property, why should you have to inventory 100% of your property? Rep. Currier reiterated, so, it is only in the area that will be cut?

Mr. Goodwin said that the lay person has a burden that is huge. How do you identify what the tree is and where it is? It is a massive burden on the general public. That is his concern with the grid. He said he is not sure most people could draw this. If it's limited to where people will do work, sure, you should be expected to, if they want to put a beach here, they want to do this, they want to build their house, they should be able to identify those trees but to do it over their whole property, he's not sure that you are going to get the right information. It's difficult for him to do it and he's not a surveyor so we do it with two people and two tape measures. And, that's acceptable. But, it is very difficult to do.

Kathryn Nelson said she wanted to address the previous issue brought up by Mr. Goodwin about the input from the streams coming into the large lakes. She represents the River's Council. She hopes that an item will be put on the agenda to discuss issues that pertain to rivers and what rivers should be covered by this act. Ideally, if you have buffers on all your rivers that come into the lakes, you would deal with some of the turbidity issues. Right now, only fourth order streams are covered. If you look at which fourth order streams flow into Winnipesaukee, you can see what is covered now. The Rivers Council's position, as per the position paper passed out, would be to use a slightly different method for what is a fourth order stream and what should be covered. This may be something that could be addressed in this commission. In order to protect the lakes, you need to protect the streams that are flowing into them.

As far as the large trees that are slumping into the lake, you cannot plan for large flooding events and you should not be setting up rules and regulations for only these large floods. These slumps, over time, become re-established. They fill in areas and grow up. In large flood events, the large pines may have some issues but in the smaller events under natural cycles, the large pines are probably doing a better job of holding the soil in place.

Paul Goodwin agreed that you cannot plan for the large floods. He believes that the streams and rivers do not matter in this particular case because of that fact, this is water running down roads, running over the bank. There was so much turbidity that there is more turbidity in Lake Winnipesaukee from the storm event than all shoreline destruction combined ever. It does not make sense that a big tree is valued higher. There may be better methods for stabilizing the bank.

Dr. Smith said that there is substantial evidence that woody vegetation and its root systems accomplish a great deal with regard to maintaining water quality. That is what the spirit of this act is. We are trying to protect the public trust which is the water quality of lakes and rivers. There is a huge amount of science to support the fact that soil, held together by woody vegetation, not only reduces siltation, but those tree and shrub roots uptake nutrients that we are trying to keep out of water bodies. Every state in our union has riparian regulations that relate to forestry activities adjacent to water bodies. If every state in the union has regulations to protect this zone, it is testimony to the importance of this issue. Dr. Smith said, to hear you say that you don't understand why trees are important, I think then we have a very important mission before us – to educate folks as to why the woodland buffer is important. The current act articulates that in the preamble very well. We do not refute that. What we are trying to do is to get a strategy that allows us to maintain these woodland buffers where we can. To note that during extreme

weather events there is going to be some siltation is true. These systems are not perfect. Absent these systems, the situation would be much worse.

Paul Goodwin replied that he was not saying that trees are not important.

Dr. Smith said that he thought he heard him say that.

Mr. Goodwin indicated that he was not sure that bigger trees are as important.

Dr. Smith replied that bigger trees have larger root systems. Bigger trees have larger root biomass. Bigger trees take up more nutrients.

Mr. Goodwin said that he will agree to disagree. If you look at big trees on Winnipesaukee, they are not holding the bank back, they are completely tipping over. There are hundreds of them. He said he is just asking a question, he is not saying he has an answer. He is just not sure the value is there. The large pine trees just do not hold the bank back.

Eric Herr stated that he understood that large trees are better than small trees. He asked, are large trees better than some number of small trees? What is the science of that?

Dr. Smith replied that if you want to get down to a case by case assessment we would need to know the details. Larger trees have larger root systems. Larger trees will be more effective in uptaking nutrients. Whether or not you could substitute "X" number of small trees to equal one big tree, would require more specifics.

Jeff Schloss noted that the point system does that. Mr. Schloss expanded on the value of large trees and saying, there are multiple functions of a large woody tree. The crown size alone covers a much wider area over the ground to protect the ground from the mechanical force of the raindrops. The rain will hit woody material as opposed to directly hitting the ground. Grass does not really absorb a lot of energy. At the bottom end of the tree is the root system which holds the soil particles together. The larger tree also provides much more transpiration which prevents large amounts of soil water from accumulating. When soil water starts to accumulate, you get sheet erosion. These large trees pump water out of the ground and cycle it back as water vapor.

What Paul is talking about is not a function of trees and the importance of trees, what Paul is talking about is what dams and the loss of wetlands do in situations where we have heavy rain. Normally, that water would not have gotten has high as it did but there is a dam that holds the water back that made Rattlesnake flood much more than it would have without the dam. Intact wetlands would have allowed the overflow water to dissipate out over bank. To say that big trees are bad is not totally the case.

Jennifer Patterson wanted to follow up on some other issues that Paul had raised that were questions in her mind too.

There are two questions where some clarification would be helpful.

• In the NWB Subcommittee's proposal, does the homeowner have to map the entire property or just the area where the project is taking place?

• The mechanics of the 50' x 50' areas. These areas start at the primary structure. Is there a more logical way to have them applied?

Dr. Smith stated that the proposal was a zone divided into 50' square blocks going back 150'. He said, we are referencing the first tier on the lakeside which is 50' back from the reference line. We welcome input as to where to establish the grid. The current thinking is at one side of the lot or the other. The obligation would be to establish a fifty foot grid starting at one sideline going across. If the lot was 175' wide, you would end up with three 50' blocks and 25' x 50' block.

Ms. Patterson indicated that the way she read the proposal, it sounded like it started in the middle.

Rep. Currier noted that this was discussed at the last meeting. It became confusing because you could end up with two 25' blocks. Everyone agreed it made more sense to start at one side and move over.

Rep. Currier asked about the term "Riparian". Typically, when you hear riparian, you mean river. Ms. Patterson replied that there is "riparian" and "littoral". Dr. Smith stated that the term for lake was "lacustrine". Jeff Schloss said that littoral meant shallow water. Dr. Smith added that the NWB subcommittee had a discussion about the term "riparian". It is not a perfect term but it's developed a reference that means waterbody. Jennifer Patterson stated that she thought riparian was fine and that people would know what it meant. Rep. Currier remembered a discussion on groundwater withdrawals and "riparian rights". Jennifer Patterson stated that the term "riparian rights" is often shorthand for rights to water.

Eric Herr said that he would build on the point to note the scientific evidence for the value of the woodland buffer because it would be part of the educational process.

Katherine Nelson noted that, from a practical standpoint, she had noticed when she uses the word riparian there is a lot of glazing over of eyes. One thought is to use "waterfront zone", which will be better understood by lay people. To the average homeowner, the word riparian is not common.

It was noted that the trees that Paul Goodwin had referred to earlier, are immediately adjacent to the reference line and have been impacted by wave action and years of erosion. There is no root system on the lakeside, there is only a root system on the land side. Therefore, the trees are supported by root systems on one side only and they lean towards the lake. There are many trees in this situation. When they fail from added erosion, they take the whole bank with them. Unfortunately, our current regulations do not allow us to build out into the lake to provide protection for those failing trees. That is one issue. The second issue is, are trees good or bad? There is no question, trees are good. It is the trees that are substantially behind the reference line that have a good root zone and are able to support the full size of the tree. The

Rep. Currier spoke about the "intent to cut" and its effect on trees. Cutting within a certain distance from streams and other waterbodies and roads is prohibited. All the major trees within 50' of the road, some 150' high, are all along the road. They are all in a hazard zone when there are unusual events like 12 inches of rain in 48 hours or high winds.

trees immediately along the shoreline are at risk.

Robert Snelling referred back to a question that Jennifer had asked previously about inventorying the whole property and the issue of permitting. He said, we had put that topic [permitting] because we thought it was a broader issue and would deal with who would implement and permit under the CSPA. Unlike Moultonborough, we are not asking for an inventory unless it is tied to development. If you are going to develop something, then you would apply for a permit from somebody. The point system would apply to that development. If you are not going to develop, then you do not have to do an inventory of all your trees. It has been inferred that there would be some kind of permitting process in place.

Jennifer Patterson noted that it would be useful to have a requirement that in any area where a tree might be affected, in any work area, to have an inventory, and any other area would be documented, perhaps with photographs, so that a decision maker coming in after the fact could see generally what it looked like, whether it was forested or not forested, but not all the detail of an inventory would be required in areas that would not be affected, particularly if it is a large property. It seems crazy to have to inventory the whole thing.

Rep. Currier asked if the inventory system was to 150'. Jim Kennedy replied yes, it was 150' but not the entire property. He indicated that the grid was only within 50'. The remainder of the 150' buffer was to be assessed on a different basis with a points system that does not require grids.

Rep. Currier asked for clarification about whether there was cutting allowed within the first 50'. Jennifer Patterson summarized the NWB Subcommittee's Draft Proposal: The first 50' is called the riparian zone. Within this zone, you can not trim the vegetation that is below the level of a shrub or sapling (below 3') except to make a path or put in an accessory structure. The grid applies for anything that is within that 50'. Between 50' and 150' you can have a lawn, you can cut the shrub layer, but the grid still applies for the larger trees within that 150'.

Jim Kennedy clarified the grid would apply if you were to do any work or expand any cleared area. Ms. Patterson added that, as with the current law, there is an exemption for building envelopes.

Rep. Currier added that if you are doing something on the shoreline, within that 150', in order to keep the 50 points, if you did not have to inventory the whole thing, you could have 50 points within that 150' of shoreline, and clear cut 10'. Bill Smith stated that the goal is to have 50 points in each 50' x 50' grid.

Paul Goodwin noted that the law now requires photographic documentation. He was not clear on if you had permit to build a beach or a boathouse or a walkway or a dock, would those structures come out of the 50 point system? Jennifer Patterson stated that her reading of the draft was that there is a building envelope just as there is in the current law and that gets subtracted. Assuming you have a permit to build a structure, you can cut down that whole area and the 50 points is for the trees outside the envelope.

Eric Herr asked if that meant that the area outside the envelope still has to achieve 50 points. Bill Smith answered yes. Mr. Herr continued, as a practical matter, if the building envelope takes up 90% of the 50' square, you would have to have a solid tree covering the rest of the square. Rep. Currier said the block would go around the envelope. Kathryn Nelson said the envelope gets taken out first under the existing process.

Bill Smith noted that one of the desirability's of the 50 feet is the acceptance by the state as a desirable setback from the reference line. It is established. There has been recognition of the importance of that zone.

Jennifer Patterson asked how the building envelope would work in practice with the draft proposal. Say you divided your whole lot into 50' blocks, starting at one property line- and the house is between 50 and 150' so it's in one of those plots, it's behind the primary building line but it's in the area to which the grid applies. The house takes up half of the 50' block with just the structure. Do you then consider the remaining part of it as a 25 sq. ft. block and would you have to have 25 points or do you have to have 50 points in that remaining block?

Kathryn Nelson replied, under the current system, you look at a site plan, take out the envelope first, you don't do any calculations, then take out the accessory structures, and then docks. After that is when Shoreland applies. Eric Herr asked, how does it apply after you do that? Ms. Nelson said, the big question is, is that going to be carried forward? Because the way it is being described, it would not happen like that. You would carve out the exemptions, and then you would apply the grids.

Robert Snelling stated that, in the situation where you are in the area between 50' and 150' and are building a house, immediately, the building envelope is exempted as well as the driveway and the septic field. Whatever you have left, the point total for 50x50 plots applies but not for no cutting of vegetation. So you could clear areas and plant grass but the 50 points for 50x50 blocks would apply. Another question is, if you want people to actually grid that out and apply that to each grid, or, what the NWB subcommittee thought was to take a snap shot of everything that's left and on average, over that entire area there would have to be 50 points per 250 square foot or 2,500 square feet, then you are fine. This means you could put in a croquet court and leave a stand of trees on either side of the property, so on the entire area it might average out. Not to have to apply the points system to every single 50 x 50 block but rather just whatever area is left after you construct the building. It is flexible.

Rene Pelletier stated that the points system works fine depending on the size of the structure you are building. But what DES is seeing take place (and the intent of this commission is stabilization, nutrient uptake, eliminating soil erosion) is houses on 100' of frontage, 10' off the property line, and 40 to 50' in depth - so you, basically, have no shoreline protection. It makes a lot of sense, to have a more simplistic way to approach the concept of not cutting more than 50% of the basal area and leaving a well distributed stand. If you don't have a segue into some sort of concept about coverage, then, what we see on the big lakes is that it really doesn't make a bit of difference because you are going to have anything from 50' to 100' stripped anyway. It will be rooftop. There will not be a stitch of vegetation there to talk about anyway. We had previously talked about the concept of "percent of impervious", and I think Bill's group concentrated on calculating the vegetation that's left with a points system. I think it works really well and it's very easy to use but it cannot be used alone based on what we see. When you cover a 15,000 square foot lot and take out the first 50', if it's a 100' frontage, there's 5,000 square feet and the rest of the lot is done. It's all impervious - rooftop.

Robert Snelling added that this argument was made when the NWB subcommittee was considering impervious as a criteria. That very fact that you can argue whether 5% reduction, or an increase of 5% in imperviousness - we were already at 40%, 50%, 60%, 70% impervious, that it became a meaningless tool. The same would apply to the points system. If a house is chewing

up 90% of the lot and the current building codes allow that, except in the 50' riparian area, this all becomes academic. That seems like a whole different set of rules that we would have to deal with. I don't think we would ever get away with saying that we would have to maintain 10% permeable land cover on most of these lots - that would be a taking. You would not be able to build anything on it.

Rene Pelletier stated that it's no more of a taking than telling people what they can do on their waterfront – whether they can build one accessory structure. This statute, by its nature is some sort of a taking of personal property. What we do at DES, we believe, is saving the homeowners because they do not see the end result that DES has observed over many many years. The point is, that the whole intent of this law when it came about was to keep some sort of natural vegetated filter that was going to protect water quality long term. That's what it is all about. If you don't have some sort of association with impervious versus vegetative removal, then I don't think we are fully completing the task of maintaining this natural vegetative buffer.

Rep. Currier asked, how do you deal with that when a town has a 10' setback from the side boundary and 10' from the road and you can build a house within that parameter which means it is 90% of the lot?

Rene Pelletier answered, you deal with percent coverage. The towns are not going to address it. Maine has an impervious component in their shoreland regulations. We see the 20 x 15 cottages being torn down. They are throw aways. The new buildings going up are wire to wire. There is no vegetative cover. On most of these sites we are talking 15,000 to 20,000 square foot buildings. It is not happening on every lake. But the point is, on the large lakes people are building ostentatious buildings where the point system will not be used anyway because it's all gone. He added that he is not advocating taking people's property. But, we are in a vacuum if we think that a grid system is going to maintain that natural removal process.

A clarification was made that tree types were not being required in the grid process, just diameters.

Jennifer Patterson observed that maybe a more effective way to approach this would be through a combination of the grid system and a limitation on impervious surfaces. She said, it sounds like what the NWB subcommittee contemplated was that even if you were building structures and subtracting the trees in the building envelope, overall on the lot as a whole, you would have to basically meet the 50 point per 50 plot. If this is so, you could achieve the same result without a limitation on impervious surface by doing that. Basically, you would be setting up an incentive system whereby you would cut down as few trees as possible to build your house because you still had to meet the 50 points regardless of the fact that you were taking down trees to build a house.

Bob Snelling said, that was the thinking of the NWB Subcommittee. He's hearing the commission would like to consider proposing a 50' impervious standard to the property which in effect regulates the building envelope as opposed to what's left after the building envelope is applied. Within the first fifty feet, there would be no cutting of under-story vegetation. Trees could be 50% cut. Fifty feet back you have to maintain no more than a 15% reduction in permeability, or 15% impermeable. The effect of that, in a practical sense, would make a lot of property unbuildable.

Jim Kennedy stated that the NWB Subcommittee had worked up a ½ acre lot and a full acre lot with a 1500 sq. foot building. This resulted in 40-50% impervious coverage (roads, driveways and building). 1500 sq. foot is small.

Rep. Currier asked for clarification on the amount of impervious coverage. Bob Snelling answered, with just the house, impervious is 30-50%. Rep. Currier noted that the Commission has been considering 10-15%. It appears that it's closer to 40%. Jim Kennedy stated that it does not appear that 10-15% can be achieved on a small lot.

Kathryn Nelson noted that when she was building her house, she was not allowed to build outside of the footprint of the existing foundation. Rene Pelletier observed that Ms. Nelson's project was probably within the primary building setback. For structures that meet the 50 foot setback – then you can build whatever you want. Most of what DES deals with is redevelopment. There are not many vacant shoreland lots. We are seeing lot line to lot line projects. If you have a 35,000 square foot lot and we hold you to 5,000 sq. ft. of untouchable in the front, and you build a house on 24,000 square feet, and you put in a septic system and driveway, you have no cover. That is perfectly legal to do within a town's building code. So you will never have to use the grid system.

Rep. Currier said that Darlene had indicated, on more than one occasion, that this is the perception the public has. When they see something like that going on, the public perceives it to be wrong because they've cut down most of the trees on the lot - although it is perfectly legal.

Jennifer Patterson stated it is clear that the 15% impervious cannot be achieved but the concept of impervious limitations should be talked about because there is a benefit to it. Even if it's 50%, then at least you're not getting 90% especially if you adopt the NWB subcommittee's recommendation for the area that is immediately close to the shoreline so that that is at least protected.

Rep. Currier asked how this would be done. Would you make it a strict requirement? A strict requirement will never pass in this legislature. It would be the kiss of death. A broad statement saying that it also should be considered, so at least people would be aware of it. Right now, people are not aware of what the issues are.

Ms. Patterson suggested putting in language that says in siting the home on a previously undeveloped site, the homeowner shall make every effort to preserve trees where possible.

Rep. Currier thought it should be more specific, use the impervious terminology, and the rational for what it is should be in the definitions.

Eric Herr said that what he was hearing from the NWB committee is the quality of the woodland buffer on the entire property. Without doing an impervious constraint, a trend constraint on impervious percentages of the of the property, just having a requirement for the woodland buffer for the entire property outside of the fifty foot blocks, would in fact allow a homeowner to make the tradeoff – the percentage that is impervious and the quality of the woodland buffer and everything else and it might be a little more sellable politically.

Rep. Currier stated the NWB Subcommittee talked about this. It gives you options with what you can do with the overall piece of property because you have a grid system in place.

Eric Herr suggested not doing the grids past the 150' and applying a points system to the rest of the property. You would end up with implicit constraint on the percentage of the property that was impervious.

Paul Goodwin added that a limit on house sizes will not be passed by the legislature. He said, the market is driving big houses. It is not worth having a camp and then a lot of it is tax base. He suggested an incentive to preserve the buffer. One of the things that had been previously discussed was the issue of towns being allowed to set their own shoreland setback. Why don't we just set a state setback of 50 feet. Right there we preserve more buffer. What if there was some way to combine this idea of how big the house is with impervious, or whatever the number is and say if you want to build a big house, you have to go back another 10 feet, so there is some incentive to want to go back.. If you want your house to be so big, then your buffer is 60 feet. Whatever that number is. He said he was not sure that the grid works because he would be able to draw the grid and do whatever he wanted to do. He was not sure how to deal with a grid that did not have 50 points. He reiterated that most of the construction on the big lakes was redevelopment. If someone has an existing structure on a lot with lawn, it results in a grid with no points in it. How do you draw the grid when the property lines are not aligned with each other and the shoreline is irregular?

He stated that the process should be black and white. You can do this, if you want to do this you must move back so many feet.

Jeff Schloss agreed with that approach. It is better to create incentives. There might even be room to go higher than the required points system. If you wanted an accessory structure or perched beach of a certain size, you would make up for it by revegetating areas that are devoid of vegetation or with additional plantings.

Even if we went to 50% impervious, many properties will not meet the 50% impervious limitation and there is no justification for the 50%. You can figure out ways to mitigate runoff. For example, you may have 75% impervious, but if you treat runoff appropriately you may have less of an impact than a 25% impervious property that is allowing runoff to go directly into the lake. The impervious requirement approach can be more difficult than the basal area, healthy well distributed tree stand, important riparian area system that has been suggested.

Jen Patterson suggested that maybe the area that is not in the riparian zone could have a lesser number of required points but have it be required regardless of whether a building is being constructed there. So, say 25 points instead of 50 points but there is no exemption for the building envelope. That way it creates incentives, if there are trees there you would put your structure in the area where there no trees. Also, there would be an incentive to plant trees or let trees grow up in these areas that have not had vegetative cover.

An alternative approach would be to take every shorefront lot and divide it in half and have half be the riparian zone within 50 feet. Then calculate the square footage. For every 100 square feet you need 100 points throughout the zone. You would do the same thing for the area that is not within the riparian zone. For every 100 square feet you need 50 or 25 points. You would not have to figure out where the squares are, you use the square footage of the property as a whole and the points system would be for the square footage of the property as a whole.

Bob Snelling said that it is being proposed by the NWB subcommittee. Once you erase out the building envelope that is allowed and supporting structures like driveways, the point density applies to the entire property. Jennifer Patterson stated that she was talking about not subtracting out the building envelope, so that you have that incentive but you have a lower number of points so that it's taking into account that fact that you are going to have to cut some trees. Mr. Snelling said that it comes back to the problem we ran into when we actually worked it up. On a ½ acre lot with a modest home, you are already chewing up the impermeable. Ms. Patterson suggested requiring a waiver for those types of lots and/or doing some plantings.

Jim Kennedy said that there's already revegetation in the rules. Jennifer Patterson added that it is the trouble spots where you would like to see more regulation. Those properties that are of concern would have to go through a process to ensure that it gets revegetated.

Bill Smith observed that the first 50' is infinitely more important, unless we are talking about very steep slopes. He said, I think there is great desirability in trying to be creative about how we handle the area beyond 50 feet. You have on the table our proposal, but I would personally welcome alternatives. Secondly, if we want to get away from a grid which is somewhat onerous to establish on the ground, then you are looking at a no-cut fifty foot buffer. Now that simplifies the regulation enormously. When we had a straw vote in this commission a couple of months ago, there was a 2 to 1 vote against a no-cut. The NH Lakes Association has me here to support a no-cut buffer. And it is, clearly the most effective approach that you could imagine in both in the regulatory sense and in the scientific sense. But, if you reject no-cut, then you have to establish some kind of a metric that allows a calculation of what can be cut and what can't be cut. That is where we end up with a grid.

Jennifer Patterson said, I am not hearing a lot of dissent on the committee to the NWB subcommittee's proposal for the first fifty feet and maybe we need to talk about these separately because most of the discussion that I am hearing is about the area beyond the fifty feet. I agree, if we can come up with a viable proposal to deal with the first fifty feet that would be a wonderful accomplishment for this committee. We may be close to being able to do that. Save the other part for a later discussion or then come up with a proposal that may need to be flushed out a bit.

Paul Goodwin asked if we should be pushing for a state standard of fifty feet. He asked, is that something we do agree on? Bob Snelling said that the NWB subcommittee had that identified as one our issues. We did not tackle it here, but one of the things we came up with was, should we require the fifty feet that the state requires? The NWB subcommittee did not deal with it. I think it should be.

Carol Granfield stated that the municipalities would want to look at that. Some are more stringent.

Rene Pelletier indicated that there were 64 towns throughout the state that have setback of less than 50 feet. Before 2002, a municipality could set its own primary building line by voter adoption. As of 2002, they took that exemption out. In that time period, 64 towns chose to have their own setback. Alton has a 30' setback. Some communities up north have 20'. It's an issue that would simplify matters.

Paul Goodwin stated that it would be that the primary building setback would be 50'statewide or greater, so that if a town wanted 65' and wanted to be greater, the town can decide that. I can tell you right now, every time we work in Alton, Darlene has to call me and say somebody called. If the intent is to preserve the woodland buffer, that is the easiest thing that we could all agree on. This is a change for better.

Rep. Currier asked the commission for a straw poll, non-binding, on the question of whether there should be a 50' primary building setback for the entire state. There was no dissent.

Robert Snelling said, we had talked about idea of an impermeable standard of some kind, that one could generate a graph that says, on one axis, size of lot and on the other axis, size of allowable home. I doubt that would ever sell but that's the essence of what we would be saying. If you have a one acre lot, you can build XX% impermeable based on whatever number we come up with, but based on a one acre lot beyond the 50' PBL, you can build a 2,500 square foot home. If you have a two acre lot you can build a 5,000 square foot home. It becomes a linear graph that determines...if you don't have a lot bigger than some particular size, you would not be able to build on it.

Eric Herr asked, why isn't it better to give the homeowner and their architect discretion, and the ability to play with the quality of the woodland buffer in the remaining space- and the size of the lot, to let them generate an answer that satisfies our needs for shorefront protection and the quality of the wood buffer - and the size of the building as opposed to an excel spread sheet.

Bob Snelling said, it comes down to the flexibility within that. The house, the driveway, the septic field, crochet court or whatever you want to put in, all of that developed land, if you want to maintain a standard of "X" impermeability, now you can play with those.

Eric Herr suggested adding the play with the quality of the wood buffer. You are playing with the size of it not the quality.

Robert Snelling said that the play involves the type of vegetation, meaning grass versus trees. Grass is impermeable. All you can do is replace one kind of tree with another.

Eric Herr noted that the NWB has already articulated, by the grading of trees, differences, you know, you are trying to skew behavior.

George Pellettieri stated that he was in favor of simplification. I'm working in a variety of different towns. One disadvantage of simplification is that there is a great deal of variability out there in soil type, slope, type of vegetative cover, definitions of permeability. There needs to be some mechanism that allows for a well thought out variance.

Rene Pelletier said, Eric raises a good point. People should be left to have some creativity in what they do. It makes sense, at some point in time once we have all agreed with the 50' (and perhaps it would be untouchable) but there is a simplistic way to approach what Eric is trying to get to which allows people to develop as they see fit. You could take square footages, whatever the lot is, say 50,000 square feet, taking out the 50 foot buffer which is 5,000 square feet, and say that you must maintain 20% vegetative coverage of some sort, then you do the math. So, if I am building a house, I know that I have to keep

20% coverage. I have 40,000 square feet left. I know that I need to maintain 8,000 square feet somehow. Then, you do whatever you want. If you want to build tennis courts, you may have to build a 10,000 square foot crochet court, whatever, everything is going to be empirical. Then, you have creativity and it does set some sort of coverage. It is not hard to figure out. It takes out the ambiguity.

Robert Snelling observed that it sounds good until you reach the threshold of where there is not enough space to build a livable home on the size lot that you have. If you have enough space to make decisions in, that is great. But, there will be a point where, for a modest size home, you have no options if you are going to meet some standard of permeability. Many lots would fall into this category. It would be an absolute taking. The state would be saying I'm sorry, your lot's not big enough.

Jennifer indicated that it would not be a taking. You can build a house, and unless you have a miniscule lot on which no house could be built. You don't have a right to build a 10,000 square foot house. It is not a taking.

We are talking about a law that operates prospectively. People will buy with notice of this restriction. That's the way the law aught to work. – to put people on notice so they can make an informed decision about what property to acquire. If Rene's proposal for 20% natural vegetation does not work for every property, establish a process to address it fairly.

Rep. Currier noted that 12:00 was approaching and Jennifer had an item on the agenda about the decision tree. He applauded the NWB subcommittee for doing so much good work.

Jeff Schloss said, a state scientific group looked a the science for justification for recommending buffers for any shoreland property in the state, and it found that it really does depend on soils and slope – there is variation. But we need to come up with a simplified approach to get at what we are all trying to achieve here which is a certain amount of vegetative cover, a certain amount of use, a certain amount of protection to the waterbody. There is variation but some minimum standards should be set. If someone wants to fight that or has an argument against that, where they can do some sort of mitigation, where they can say that I am on a well drained area and I don't have certain problems, etc. There are people that might be able to do that. Give them a chance to bring that up as an exception or variance. Make a process available. Maine essentially said 25% impervious or 10,000 square feet whichever is larger.

Rene Pelletier indicated that a provision for such a variance is in the statute now. We have what we call a hardship waiver. If someone were to come in who had one of those 10,000, 15,000 square foot lots, and they can't do anything with it, they will request a variance based on hardship. Many times, their request will be approved because they propose to enhance the vegetation or make other improvements on the property. That process exists. If you start with a minimum, and if someone is in a situation, they have a right to apply for a variance through hardship. The reality is, if I have money, and I can build a 25,000 square foot house on a 35,000 square foot lot, then it doesn't mean that I have the inherent right, without a taking, in building that structure if it's not for the good of all, and in this case, it's the public trust. I'd like to go out and buy a Porsche and do 120 but I can't. Is that a taking? The concept is that we all have guidelines to live by. Here we are dealing with long term perpetuity of the public trust for our kids and our kid's kids. I don't believe that someone has a right to build a 30,000 square foot house just because they can. Our charge is to get something in place that

will protect the public waters of the state long after we are all gone. I don't want, in doing that, to take away everybody's right to have a reasonable place to live either. More people today care about the environment then ever before. But, there can be a disconnect between coverage and water quality. We need to address that somehow.

Paul Goodwin said that there probably is a taking here. People are paying taxes on their waterfront property with the understanding that they could build a 35,000 square foot house. If we make the proposal that we come up with reasonable. It is possible to use some creativity and maybe have that 35,000 square foot house by dealing with stormwater. It should be black and white.

Bob Snelling asked, would it be reasonable to ask you landscape architects, Eric, and some others to take a crack at coming up with a number, a percent impermeable, a percent allowed impermeable from 50' back, what that number would be, and what's considered impermeable? What would be reasonable?

Rep. Currier stated that the intent would be to get that to the NWB subcommittee before the next meeting so that they could act on it and come back with some formal recommendations.

Paul Goodwin suggested using 3 or 4 real world files which could be roughed out and given to the subcommittee.

Bob Snelling observed, using those examples, where would a reasonable place be to draw the line?

Jeff Schloss stated that the science says that it's 10% based on small order streams. It's based on a watershed. When you get somewhere between 6-10%, you start to see loss of water quality and wildlife habitat. Shoreland lots would not be able to meet that. This is where you have to step away from science into reasonability. That 10% is for streams. Lakes do not flow so the assumption is for lakes it would be even less. A point system for trees could be used in which we are just counting three inches or greater. That is simple. We need to move away from the scientific basis. We know the more vegetation the better, and we know that we are allowing for more impervious surfaces in a shoreland development than is just straight protected on that alone, so we have justification for requiring that buffer area. Go back to natural vegetation. Not basal area. If you are going to develop a site, and there is vegetation already there, keep it. If there isn't and you need to get more, so that you can do it, then plant it. Just make it that simple. Get away from impervious stuff.

Jim Kennedy observed that if you get back to the original spirit of the law which was that you can cut 50%, work that into the square footage.

Rep. Currier asked if Paul Goodwin was going to take charge of the new subcommittee. Paul Goodwin answered in the affirmative. Discussion about septic design.

Rene Pelletier said, everyone understands natural vegetation. We are looking at huge subdivisions that are using porous pavement. That is the next wave of what people are doing. The concept of drainage and recharge is getting further with low impact development. Everybody understands the concept of undisturbed natural vegetation.

It will be easier to grasp if you calculate what is doable on site. For example, keeping 10% natural vegetation. Natural vegetation is easy to grasp.

Rep. Currier stated that we appear to have a task for the subcommittee for the next meeting. Kathryn Nelson asked, do we want to go with the impervious? It sounds like you charged them to go back to impervious.

Rep. Currier asked Jennifer Patterson to report on the Decision Tree.

Jennifer Patterson apologized for not getting it back to the subcommittee to review first. It is a thumbnail of what the requirements of the CSPA are and the purpose is to enable someone who wants to do a project to look at as little of the CSPA as they have to.

Ms. Patterson gave some examples and noted that one would have to decide what the most complex activity was. The most complex activities are on the left and the least complex are on the right. Accessory structures are not done yet. An accessory structure is secondary to the primary structure. The decision tree reflects what the law is right now. It can help determine how changes to the law would interact with aspects of the CSPA.

Kathryn Nelson asked, when it says "project" does that mean any portion of the project? Ms. Patterson indicated that it could say "any portion of the project". On page three it shows that all subdivisions and condo conversions have to be approved by DES.

The following points were raised during a general discussion of the decision tree:

- Should repairs that involve significant changes or expansions go through DES? They must under the current statute. Proposed buildings for non-conforming lots of record must also go through DES.
- A posted permit might help eliminate calls to DES reporting activity that appears to be a violation. The scope of the project would be defined.
- Under the current law, local building permitting entities are required to ensure that permits are in compliance with the CSPA. How is this interpreted, implemented and enforced? There has been an assumption on the part of the towns that DES had looked at everything.
- Could the decision tree be adopted into rule or statute?

Robert Snelling noted that some NH towns do not have zoning, a building inspector, or a permit process.

Kathryn Nelson said, there is a letter from Collis Adams that speaks to this issue. Could we have a copy of that? It was sent out to the towns but it did not get a lot of attention. If we could have a copy, it would be helpful. Rene Pelletier said he would e-mail a copy to everyone on the commission.

Commission members should go through the decision tree and highlight areas for discussion.

Rep. Currier stated that the next meeting will be Monday, August 14, 2006. He will contact the other legislative members of the commission to provide the work products generated thus far and to see if they can attend the next meeting.

Meeting adjourned at 11:59.